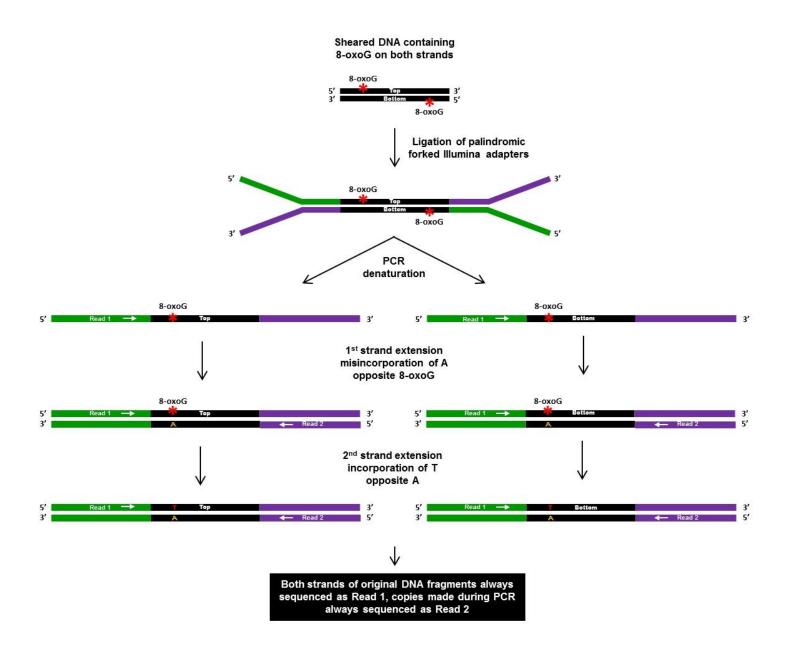
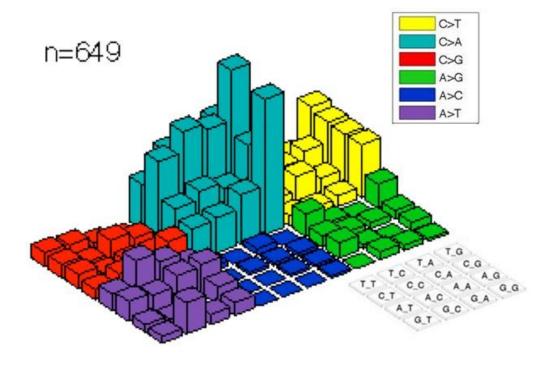


Supplemental Figure 1: One-way ANOVA of Artifact-Q score by library protocol used. Whole genome libraries rarely show Artifact-Q scores lower than 30 and have an overall significantly higher mean than Hybrid Capture libraries made during the same time period.



Supplemental Figure 2: Diagram detailing source of the read orientation specificity seen with these oxidation artifacts. As the 8-oxoG lesions occur in shearing prior to ligation of palindromic Illumina adapters, the G>T transversion always appears in sequencing read 1 and C>A always in sequencing read 2.



Supplemental Figure 3: Lego plot showing total mutations for a lung adenocarcinoma tumor. The presence of C>A artifacts is masked here by the high mutation rate of this tumor type, particularly of biologically relevant smoking induced C>A transversions.